

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS:

1.-20. (Canceled)

21. (Currently Amended) A writing instrument comprising:

an ink occlusion body disposed in a barrel, the ink occlusion body including a capillary material impregnated with ink;

a pen tip including a capillary material disposed in a writing part of the writing instrument, wherein the ink impregnated in the ink occlusion body is fed to the pen tip via an ink guiding feed;

wherein ink flows from the capillary material of said occlusion body by virtue of capillary force and ink flows into the capillary material of said pen tip by virtue of capillary force, said ink guiding feed lacking any capillary material therewithin;

wherein said ink guiding feed is tubular and disposed within the barrel between the ink occlusion body and the pen tip so as to prevent outside air from flowing in when the ink occlusion body is impregnated with ink, and allowing outside air to flow into the barrel as ink in the ink occlusion body is depleted; and

wherein said ink guiding feed has visibility such that a sign of exhausting the ink fed from the ink occlusion body to the pen tip is detected by visually observing the empty ink guiding feed via a visible part formed in the barrel.

22. (Withdrawn) A writing instrument of a twin type in which an ink impregnated into an ink occlusion body in a barrel is fed to respective pen tips in writing parts disposed at both sides of the barrel, wherein the ink fed to either of the pen tips is fed to the pen tip via an ink guiding feed having visibility, and a sign of exhausting the ink fed from the ink occlusion body is detected by visually observing the ink guiding feed described above via a visible part formed in the barrel.

23. (Withdrawn) The writing instrument as described in claim 21, wherein the ink impregnated into the ink occlusion body is fed to the ink guiding feed having visibility via an inter-feeder.

24. (Withdrawn) The writing instrument as described in claim 22, wherein the ink impregnated into the ink occlusion body is fed to the ink guiding feed having visibility via an inter-feeder.

25. (Withdrawn) The writing instrument as described in claim 23, wherein the inter-feeder is brought into contact with the inside of the ink occlusion body in a length of 5 % or more based on an overall length of the ink occlusion body.

26. (Withdrawn) The writing instrument as described in claim 24, wherein the inter-feeder is brought into contact with the inside of the ink occlusion body in a length of 5 % or more based on an overall length of the ink occlusion body.

27. (Withdrawn) The writing instrument as described in claim 23, wherein the inter-feeder has a cross-sectional area of 1 to 90 % based on a cross-sectional area of the ink occlusion body.

28. (Withdrawn) The writing instrument as described in claim 24, wherein the inter-feeder has a cross-sectional area of 1 to 90 % based on a cross-sectional area of the ink occlusion body.

29. (Withdrawn) The writing instrument as described in claim 23, wherein the inter-feeder has larger capillary force than that of the ink occlusion body.

30. (Withdrawn) The writing instrument as described in claim 24, wherein the inter-feeder has larger capillary force than that of the ink occlusion body.

31. (Withdrawn) The writing instrument as described in claim 23, wherein the inter-feeder has a cross-section structure comprising an inner layer and an outer layer, and the outer layer has larger capillary force than that of the inner layer.

32. (Withdrawn) The writing instrument as described in claim 24, wherein the inter-feeder has a cross-section structure comprising an inner layer and an outer layer, and the outer layer has larger capillary force than that of the inner layer.

33. (Withdrawn) The writing instrument as described in claim 23, wherein the ink fed to the ink guiding feed having visibility via the inter-feeder is fed to the pen tip further via a pen tip feeder.

34. (Withdrawn) The writing instrument as described in claim 24, wherein the ink fed to the ink guiding feed having visibility via the inter-feeder is fed to the pen tip further via a pen tip feeder.

35. (Withdrawn) The writing instrument as described in claim 23, wherein the inter-feeder comprises any one of a fiber bundle feed, porous sintered body of resin particles and a sliver feed, and a passage cross-sectional area for an ink flowing through the ink guiding feed can substantially be controlled by providing the inter-feeder with continuous passages while maintaining an apparent cross-sectional area of the ink guiding feed.

36. (Withdrawn) The writing instrument as described in claim 24, wherein the inter-feeder comprises any one of a fiber bundle feed, porous sintered body of resin particles and a sliver feed, and a passage cross-sectional area for an ink flowing through the ink guiding feed can substantially be controlled by providing the inter-feeder with continuous passages while maintaining an apparent cross-sectional area of the ink guiding feed.

37. (Previously Presented) The writing instrument as described in claim 21, wherein a surface of the ink guiding feed which is brought into contact with the ink is formed of a material or the ink guiding feed itself is formed of a material having a smaller surface tension than that of the ink.

38. (Withdrawn) The writing instrument as described in claim 22, wherein a material of a face of the ink guiding feed having visibility which is brought into contact with the ink or a material of the ink guiding feed itself has a smaller surface tension than that of the ink.

39. (Withdrawn) The writing instrument as described in claim 21, wherein the occlusion body has a distribution in capillary force such that it is increased toward a pen tip side.

40. (Withdrawn) The writing instrument as described in claim 22, wherein the occlusion body has a distribution in capillary force such that it is increased toward a pen tip side.

41. (Withdrawn) The writing instrument as described in claim 21, wherein an inner diameter of the barrel is narrower toward the pen tip side.

42. (Withdrawn) The writing instrument as described in claim 22, wherein an inner diameter of the barrel is narrower toward the pen tip side.

43. (Withdrawn) The writing instrument as described in claim 21, wherein plural ribs are formed in an axial direction on an inner wall of the pen tip side of the barrel.

44. (Withdrawn) The writing instrument as described in claim 22, wherein plural ribs are formed in an axial direction on an inner wall of the pen tip side of the barrel.

45. (Withdrawn) The writing instrument as described in claim 21, wherein a plurality of the ink guiding feeds having visibility is provided.

46. (Withdrawn) The writing instrument as described in claim 22, wherein a plurality of the ink guiding feeds having visibility is provided.

47. (Withdrawn) The writing instrument as described in claim 21, wherein the ink impregnated into the ink occlusion body is fed to the pen tip through an ink-feeder in addition to the ink guiding feed having visibility.

48. (Withdrawn) The writing instrument as described in claim 22, wherein the ink impregnated into the ink occlusion body is fed to the pen tip through an ink-feeder in addition to the ink guiding feed having visibility.

49. (Withdrawn) The writing instrument as described in claim 21, wherein a passage cross-sectional area for the ink flowing through the ink guiding feed and flow resistance of the ink can substantially be controlled by filling the ink guiding feed having visibility with a fiber bundle feed or a porous sintered body of resin particles which has a smaller surface tension than that of the ink and has a color which is different from that of the ink while maintaining an apparent cross-sectional area of the ink guiding feed.

50. (Withdrawn) The writing instrument as described in claim 22, wherein a passage cross-sectional area for the ink flowing through the ink guiding feed and flow resistance of the ink can substantially be controlled by filling the ink guiding feed having visibility with a fiber bundle feed or a porous sintered body of resin particles which has a smaller surface tension than that of the ink and has a color which is different from that of the ink while maintaining an apparent cross-sectional area of the ink guiding feed.

51. (Previously Presented) The writing instrument as described in claim 21, wherein the visible part in the barrel has a length of 1 mm or more and not longer than an overall length of the writing instrument.

52. (Withdrawn) The writing instrument as described in claim 22, wherein the visible part in the barrel has a length of 1 mm or more and not longer than an overall length of the writing instrument.

53. (Previously Presented) The writing instrument as described in claim 21, wherein the ink guiding feed has an ink passage cross-sectional area of 8×10^{-2} to 80 mm².

54. (Withdrawn) The writing instrument as described in claim 22, wherein the ink guiding feed has an ink passage cross-sectional area of 8×10^{-2} to 80 mm².

55. (Previously Presented) The writing instrument as described in claim 21, wherein the ink has a surface tension of 18 mN/ or more at 25 °C.

56. (Withdrawn) The writing instrument as described in claim 22, wherein the ink has a surface tension of 18 mN/ or more at 25 °C.

57. (Previously Presented) The writing instrument as described in claim 21, wherein the ink has a viscosity of 500 mPa·s or less at 25 °C.

58. (Withdrawn) The writing instrument as described in claim 22, wherein the ink has a viscosity of 500 mPa·s or less at 25 °C.

59. (Previously Presented) A writing instrument comprising:
a barrel having a visible portion;
an ink occlusion body disposed in the barrel;
a writing part including a pen tip; and
an ink guiding feed defined by a hollow tubular body without any capillary material within the hollow tubular body, and formed of a transparent or translucent material disposed between the ink occlusion body and the pen tip in the barrel;
wherein ink impregnated in the ink occlusion body is fed to the pen tip under capillary force via the ink guiding feed, and a sign of exhausting the ink fed from the ink occlusion body is detected by visually observing an empty tubular body of the ink guiding feed through the visible portion of the barrel.

60. (Previously Presented) The writing instrument as described in claim 59, wherein the visible portion of said barrel generally corresponds at least to a location of said ink guiding feed within said barrel, said barrel further including a non-visible portion generally corresponding to a location of at least one of said writing part and said ink occlusion body.

61. (Previously Presented) The writing instrument as described in claim 21, wherein the ink guiding feed is a hollow tube having a front end part, a rear end part, and an intermediate part therebetween, the rear end part of the ink guiding feed being disposed within the ink occlusion body, the front end part of the ink guiding feed being inserted into a rear end part of the pen tip, and the intermediate part being visible via the visible part formed in the barrel.